

THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

Paper No. 18

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte WOLFGANG HERR,
RALF SIGLING and
HORST SPIELMANN

Appeal No. 97-3199
Application 08/273,767¹

ON BRIEF²

Before COHEN, FRANKFORT and MCQUADE, Administrative Patent

¹ Application for patent filed July 12, 1994.

² Upon initial study of this case during on brief review, a request for oral hearing was discovered appended to the last page of an appendix to the reply brief (Paper No. 16). At the request of this panel of the board, Program and Resource Administrator Craig Feinberg telephoned appellants' representative Mr. Werner H. Stemer on September 10, 1998 to inquire as to whether a date for an oral hearing should be set, or whether the case could be decided on brief. Mr. Feinberg has informed us that Mr. Stemer authorized a decision on brief. As a concluding point, we make reference to 37 CFR § 1.194(a) which specifies that an appeal decided without an oral hearing receives the same consideration by the Board of Patent Appeals and Interferences as appeals decided after an oral hearing.

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Judges.

COHEN, Administrative Patent Judge.

DECISION ON APPEAL

This is an appeal from the final rejection of claims 1 through 4, 6 and 8. Claims 5, 7, and 9 through 11 are objected to by the examiner as being dependent upon a rejected base claim, but would be allowable according to the examiner if rewritten in independent form including all of the limitations of the base claim and any intervening claims. These claims constitute all of the claims in the application.

Appellants' invention pertains to a combined mixing and deflection unit. An understanding of the invention can be derived from a reading of exemplary claim 1, a copy of which appears in the appendix to the main brief (Paper No. 14).

As evidence of obviousness, the examiner has applied the documents listed below:

Gilles et al. (Gilles)	3,831,350	Aug. 27, 1974
Knief	4,786,185	Nov. 22, 1988

The following rejections are before us for review.

Claims 2 and 3 stand rejected under 35 U.S.C. § 112,

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second paragraph, as being indefinite.

Claims 1 and 8 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Knief.

Claims 2 and 3 stand rejected under 35 U.S.C. § 103 as being unpatentable over Knief.

Claims 1, 4, 6, and 8 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Gilles.

The full text of the examiner's rejections and response to the argument presented by appellants appears in the main and supplemental answers (Paper Nos. 15 and 17), while the complete statement of appellants' argument can be found in the main and reply briefs (Paper Nos. 14 and 16).

In the main brief (page 8), appellants indicate, relative to the art rejections, that claims 4, 6, and 8 stand or fall with independent claim 1, and that claims 2 and 3 are argued separately and do not stand or fall with claim 1. As to the rejection under 35 U.S.C. § 112, second paragraph, appellants state that claim 3 stands or falls with claim 2.

OPINION

In reaching our conclusion on the issues raised in this

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appeal, this panel of the board has carefully considered appellants' specification and claims, the applied patents,³ and the respective viewpoints of appellants and the examiner. As a consequence of our review, we make the determinations which follow.

The indefiniteness issue

We reverse the rejection of claims 2 and 3 under 35 U.S.C. § 112, second paragraph.

As pointed out by the examiner (main answer, page 4), the copy of claim 2 in the appendix to the main brief is in error. Therefore, we refer to this claim as it appears in the appendix attached to the reply brief (Paper No. 16).

As perceived by the examiner, it is not clear what is being set forth by the language "each of said openings has an

³ In our evaluation of the applied patents, we have considered all of the disclosure thereof for what it would have fairly taught one of ordinary skill in the art. See In re Boe, 355 F.2d 961, 965, 148 USPQ 507, 510 (CCPA 1966). Additionally, this panel of the board has taken into account not only the specific teachings, but also the inferences which one skilled in the art would reasonably have been expected to draw from the disclosure. See In re Preda 401 F.2d 825, 826, 159 USPQ 342, 344 (CCPA 1968).

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area equal to an area of a surface which exactly covers said respective openings" in claim 2 (lines 3 and 4).

We agree with the examiner that the specified language is somewhat awkward, or "not elegant" as acknowledged by appellants (main brief, page 14). Nevertheless, read in light of the underlying disclosure, we consider the content of claim 2 to be understandable and definite to the extent that the metes and bounds of the claim coverage is determinate. More specifically, we view this language of lines 3 and 4 as simply denoting the area coverage of the openings, a necessary area for ascertaining the obstruction ratio subsequently set forth in claim 2. It is for this reason that the rejection must be reversed.

The anticipation rejection of claims 1 and 8

We affirm the rejection of claim 1 under 35 U.S.C. § 102(b) based upon the Knief patent, as well as the rejection of claim 8 which stands or falls with claim 1.

Anticipation under 35 U.S.C. 102(b) is established only when a single prior art reference discloses, either expressly or under principles of inherency, each and every element of a

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claimed invention. See In re Paulsen, 30 F.3d 1475, 1478-79, 31 USPQ2d 1671, 1675 (Fed. Cir. 1994), In re Spada, 911 F.2d 705, 708, 15 USPQ2d 1655, 1657 (Fed. Cir. 1990), and RCA Corp. v. Applied Digital Data Sys., Inc., 730 F.2d 1440, 1444, 221 USPQ 385, 388 (Fed. Cir. 1984). However, the law of anticipation does not require that the reference teach specifically what an appellant has disclosed and is claiming but only that the claims on appeal "read on" something disclosed in the reference, i.e., all limitations of the claim are found in the reference. See Kalman v. Kimberly Clark Corp., 713 F.2d 760, 772, 218 USPQ 781, 789 (Fed. Cir. 1983); cert. denied, 465 U.S. 1026 (1984).

In the present case, we find that the mixing and deflection unit of claim 1 is readable upon the static mixing apparatus disclosed by Knief. More specifically, as we see it, the content of claim 1 is addressed by the Knief apparatus, with its upstream 31, 48 and downstream 50 flow directions, as disclosed (column 6, lines 54 through 68) and depicted (Figure 1). Of particular importance, is the patentee's express indication (column 6, lines 20 through 28) that it is within

the scope of the invention to have equally sized and spaced apertures, although such an embodiment is not preferred.

Appellants' argument (main brief, pages 8 through 12) does not persuade us that the examiner erred in rejecting claim 1 as being anticipated by the Knief reference. Like the examiner (answer, page 8), we do not view the characterization by appellants of the claimed device as one for deflecting in a "macroscopic sense" as distinguishing the claimed invention from the reference apparatus. Neither claim 1, nor the underlying disclosure, ever address the deflection of a flowing medium in a macroscopic sense. Further, the argument relating to back pressure (main brief, pages 9 and 10) fails to convince us that the combined mixing and deflection unit as defined in claim 1 does not read on the apparatus taught by Knief. Appellants, in error, argue before this board (brief, pages 10 and 11) that the openings formed in the plate of Knief are clearly not evenly distributed when, as indicated supra, the patent expressly teaches an even distribution. Contrary to appellants' point of view (main brief, page 12 and reply brief, pages 2 and 3), we determined that the claimed upstream and downstream flow directions read on the flows 31,

48 and 50, respectively, depicted (Figure 1) and discussed by Knief. Accordingly, and again contrary to the view of appellants (brief, page 12), we find that the subject matter of claim 1 is anticipated by the Knief teaching.

The obviousness rejection of claims 2 and 3

We affirm the rejection of each of claims 2 and 3 under 35 U.S.C. § 103 founded upon the disclosure of Knief.

Of particular significance to us, in regard to the content of each of claims 2 and 3, is the explicit teaching by Knief (column 2, lines 53 through 57) that the ratio of total aperture flow area to first tubular portion cross-sectional flow area can be adjusted to optimally minimize the effect on fluid flow rate. Knief (column 4, line 54 to column 5, line 56) further expressly discusses total flow area of the apertures. On the basis of the above teachings, this panel of the board readily perceives that those having ordinary skill in the art well understood aperture flow area as a result effective variable. As such, we make the determination, based upon the Knief teaching considered in its entirety, that obtaining working obstruction ratios, such as those now

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claimed, predicated upon the area of openings (apertures) and total guide area would have simply involved the discovery of optimum values for a result effective variable by one having ordinary skill in this art. See In re Boesch, 617 F.2d 272, 205 USPQ 215, 219 (CCPA 1980).

Contrary to the argued position of appellants (main brief, page 13), we concluded, supra, that the determination of obstruction ratios, as set forth in each of claims 2 and 3, would have been an obvious matter for one having ordinary skill in the art when appellants' invention was made.

The anticipation rejection of claims 1, 4, 6, and 8

We affirm the rejection of claim 1 under 35 U.S.C. § 102(b)

based upon the Gilles document, with the rejection of claims 4, 6, and 8 likewise being affirmed since they stand or fall with claim 1.

At the outset, it is important to recognize that claim 1 requires, inter alia, a guide "configuration", with the

"configuration" having openings therein being evenly distributed over the guide "configuration". Based upon appellants' underlying disclosure, the broadly claimed guide "configuration" is readable upon a guide "configuration", such as shown in appellants' Figure 2, wherein "openings" in the "configuration" are spaces about the trapezoidal guide vanes 16a to 16e and the support pipes 18.

With the above claim analysis in mind, it is at once apparent to this panel of the board that the combined mixing and deflecting unit of claim 1 is addressed by the Gilles document (Figure 3). The Gilles reference reveals, in particular, a guide "configuration", as broadly characterized in claim 1, in the form of slat 10a, for example, which provides openings therein, i.e., the spaces about the tongues 11 permitting the passage of fluid.

The argument advanced by appellants (main brief, pages 13 and 14) is not persuasive. We are in basic agreement with the views expressed by the examiner in the answer (page 11) regarding the Gilles patent. We would only add that, contrary to the view set forth in the main brief (page 14), the characterized "voids" between the respective tabs of Gilles

appear to us to be clearly akin to the "voids" (openings) about the trapezoidal guide vanes 16a to 16e and support pipes 18 present in the "guide configuration" seen in appellants' Figure 2. Additionally, unlike appellants (main brief, page 14), we recognize the even distribution of tongues 11 in the guide configuration of Gilles (Fig. 3) as incorporating an even distribution of openings thereabout.

In summary, this panel of the board has:

reversed the rejection of claims 2 and 3 under 35 U.S.C. § 112, second paragraph, as being indefinite;

affirmed the rejection of claims 1 and 8 under 35 U.S.C. § 102(b) as being anticipated by Knief;

affirmed the rejection of claims 2 and 3 under 35 U.S.C. § 103 as being unpatentable over Knief; and

affirmed the rejection of claims 1, 4, 6, and 8 under 35 U.S.C. § 102(b) as being anticipated by Gilles.

The decision of the examiner is affirmed.

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No time period for taking any subsequent action in
connection with this appeal may be extended under 37 CFR
§ 1.136(a).

AFFIRMED

IRWIN CHARLES COHEN)	
Administrative Patent Judge))
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)	
)	BOARD OF PATENT
CHARLES E. FRANKFORT)	
Administrative Patent Judge)	APPEALS AND
)	
)	INTERFERENCES
)	
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